

CPSC120_Program02

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1 CPSC120: Program 2 - Variable and Basic Operations

In this programming assignment you will complete the following tasks with python.

1.1 Task 1: Fill in the missing code

Replace `***` in the following code with a statement that will print a message like **‘Congratulations! Your grade of 91 earns you an A in this course’**. Your statement should print the value stored in the variable `grade`:

```
[ ]: grade = 91
      if grade >= 90:
          ***
```

Expected Output:

‘Congratulations! Your grade of 91 earns you an A in this course’

1.2 Task 2: (Circle Area, Diameter and Circumference)

For a circle of radius 2, display the diameter, circumference and area. Use the value 3.14159 for PI. Use the following formulas (r is the radius): - diameter = 2 * r - circumference = 2 * PI * r - area = PI * r * r

```
[ ]: pi = 3.14159
      radius = 2

      # your code below
```

****Expected Output**:**

Diameter = 4.00 Circumference = 12.57 Area = 12.57

1.3 Task 3: (Table of Squares and Cubes)

Write a script that calculates the squares and cubes of the numbers from 0 to 5. Print the resulting values in table format, as shown below. Use the tab escape sequence to achieve the three-column output.

```
[ ]: # your code below
```

****Expected Output**:**

number square cube 0 0 0 1 1 1 2 4 8 3 9 27 4 16 64 5 25 125

[]: